

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for manufacturing a circuit board comprising:

attaching a mask film, where a squeegee cleaning part has been formed at a predetermined position, to a substrate; then film to a substrate in at least one squeegee area, the mask film including a first surface opposite a surface attached to the substrate;

forming a plurality of depressions in the first surface in the at least one squeegee area, each depression defining a perimeter portion, each perimeter portion having an elevation higher than an elevation of the first surface;

forming a through-hole; and through-hole through the mask film and the substrate in the at least one squeegee area;

filling conductive paste into the through-hole by using a squeezing method operation in the at least one squeegee area; and

cleaning a squeegee using the formed plurality of depressions during the squeezing operation.

2. (Currently Amended) A method for manufacturing a circuit board comprising:

attaching a mask film to both sides of a substrate; then to a substrate in at least one squeegee area, the mask film including a first surface opposite a surface attached to the substrate;

forming a squeegee cleaning part at the first surface in the at least one squeegee area, the squeegee cleaning part defining a perimeter portion having an elevation higher than an elevation of the first surface;

forming a through-hole; and through-hole through the substrate and the mask film in the at least one squeegee area;

filling conductive paste into the through-hole by using a squeezing method, operation in the at least one squeegee area; and

cleaning a squeegee using the squeegee cleaning part during the squeezing operation,

~~wherein~~ wherein the squeegee cleaning part is formed at a predetermined position of position in the mask film before the filling of the conductive paste.

3. (Currently Amended) The method for manufacturing a circuit board of claim 1,

wherein the predetermined-position is plurality of depressions are formed at a position of an unnecessary part of a product area which is not used to form a portion of the circuit board or an area outside of the of a product area of a paste-filling area of the mask film and within a printing range.

4. (Currently Amended) The method for manufacturing a circuit board of claim 1,

wherein the squeegee cleaning part each depression is formed with a tooth through hole a through-hole formed at the in the mask film.

5. (Currently Amended) The method for manufacturing a circuit board of claim 1,

wherein the squeegee cleaning part each depression is a no-penetrated linear groove formed at a paste-filling area of the mask film, the linear groove being formed so as not to penetrate through the substrate.

6. - 7. (Cancelled)

8. (Currently Amended) The method for manufacturing a circuit board of claim 5,

wherein the no-penetrated forming of each linear groove of the mask film is processed by includes processing the linear groove using a cutting edge.

9. (Original) The method for manufacturing a circuit board of claim 8,

wherein the cutting edge is a round blade.

10. (Original) The method for manufacturing a circuit board of claim 9,

wherein the round blade is fixed to a blade-fixing section having vertically sliding function with a certain load so as not to rotate.

11. (Currently Amended) The method for manufacturing a circuit board of claim 10, wherein ~~further comprising setting a depth of the linear groove and a height and the elevation of a swollen portion the perimeter portion of the squeegee cleaning part are set plurality of depressions by adjusting an edge angle of the round blade and the and a load.~~

12. (Currently Amended) The method for manufacturing a circuit board of claim 7~~claim 1,~~

wherein the swollen ~~the elevation of the perimeter portion is not lower than of each depression is above the first surface by 3μm or more.~~

13. (Previously Presented) The method for manufacturing a circuit board of claim 1, wherein the substrate is a prepreg where resin material, whose main body is thermosetting resin, is impregnated into a fabric or a nonwoven fabric, thereby forming B-stage.

14. (Currently Amended) The method for manufacturing a circuit board of claim 13, wherein aramid fabric ~~is als~~ the main body of the fabric or the nonwoven fabric.

15. (Currently Amended) The method for manufacturing a circuit board of claim 13, wherein glass fiber ~~is als~~ the main body of the fabric or the nonwoven fabric.

16. (Currently Amended) The method for manufacturing a circuit board of claim 1, wherein:

the filling of the conductive paste into the through-hole by using the squeezing method ~~operation comprises:~~

filling the conductive paste into the through-hole by reciprocating ~~are reciprocating the~~ squeegee on the circuit board; and

the cleaning of the squeegee using the formed plurality of depressions during the squeezing operation includes cleaning an edge of the squeegee by using the squeegee cleaning partplurality of depressions.

17. (Withdrawn) An apparatus for manufacturing a circuit board comprising:

a transporting means for transporting a substrate;

supplying means, which are placed above and below the transporting means, for supplying mask films;

a laminate roll; and

a groove processing section, which is placed behind the laminate roll and above the transporting means, for processing a groove at the mask film.

18. (Withdrawn) The apparatus for manufacturing a circuit board of claim 17,

wherein the groove processing section is formed of a blade-fixing section including a blade with a certain range of an edge angle and a blade-fixing-section-installing unit having a sliding section,

wherein the blade-fixing section is capable of sliding up and down at the sliding section of the blade-fixing-section-installing unit.

19. (Withdrawn) The apparatus for manufacturing a circuit board of claim 18,

wherein the blade is a round blade, and fixed to the blade-fixing section so as not to rotate.

20. (Withdrawn) The apparatus for manufacturing a circuit board of claim 17,

wherein the groove processing section placed above the transporting means is capable of being positioned and fixed.

21. (Withdrawn) The apparatus for manufacturing a circuit board of claim 17, further comprising:

a backing roll directly under the groove processing section and under the transporting means.

22. (Withdrawn) The apparatus for manufacturing a circuit board of claim 18,

wherein the edge angle of the blade ranges 30-90°.

23. (Currently Amended) The method for manufacturing a circuit board of claim 2,

wherein the predetermined position is a position ~~of an unnecessary part of a product area which is not used to form a portion of the circuit board or an area outside of the~~ of a product area of a paste-filling area of the mask film and within a printing range.

24. (Currently Amended) The method for manufacturing a circuit board of claim 2,

wherein the squeegee cleaning part is a ~~no-penetrated~~-linear groove formed at a paste-filling area of the mask film, ~~the linear groove being formed so as not to penetrate through the substrate~~.

25. (Currently Amended) The method for manufacturing a circuit board of claim 24,

wherein the squeegee cleaning part is a plurality of the ~~no-penetrated~~-linear ~~groove~~ grooves.

26. (Cancelled)

27. (Currently Amended) The method for manufacturing a circuit board of claim 24,

wherein the ~~no-penetrated~~ forming of the linear groove of the mask film is processed by ~~includes~~ processing the linear groove using a cutting edge.

28. (Previously Presented) The method for manufacturing a circuit board of claim 27,

wherein the cutting edge is a round blade.

29. (Previously Presented) The method for manufacturing a circuit board of claim 28,

wherein the round blade is fixed to a blade-fixing section having vertically sliding function with a certain load so as not to rotate.

30. (Currently Amended) The method for manufacturing a circuit board of claim 29, wherein further comprising setting a depth of the linear groove and a height of a swollen the elevation of the perimeter portion of the squeegee cleaning part are set by adjusting an edge angle of the round blade and the load.

31. (Currently Amended) The method for manufacturing a circuit board of claim 26 claim 2,

wherein the swollen elevation of the perimeter portion is not lower than is above the first surface by 3μm or more.

32. (Previously Presented) The method for manufacturing a circuit board of claim 2, wherein the substrate is a prepreg where resin material, whose main body is thermosetting resin, is impregnated into a fabric or a nonwoven fabric, thereby forming B-stage.

33. (Currently Amended) The method for manufacturing a circuit board of claim 32, wherein aramid fabric is-a-is the main body of the fabric or the nonwoven fabric.

34. (Previously Presented) The method for manufacturing a circuit board of claim 32, wherein glass fiber is-a-is the main body of the fabric or the nonwoven fabric.

35. (Currently Amended) The method for manufacturing a circuit board of claim 2, wherein the filling of the conductive paste into the through-hole by using the squeezing methodoperation comprises:

filling the conductive paste into the through-hole by reciprocating reciprocating the squeegee on the circuit board; and

the cleaning of the squeegee includes cleaning an edge of the squeegee by using the squeegee cleaning part.